



## Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-421



## Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS)

As of FY 2015 President's Budget

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Common Acronyms and Abbreviations

Acq O&M - Acquisition-Related Operations and Maintenance  
APB - Acquisition Program Baseline  
APPN - Appropriation  
APUC - Average Procurement Unit Cost  
BA - Budget Authority/Budget Activity  
BY - Base Year  
DAMIR - Defense Acquisition Management Information Retrieval  
Dev Est - Development Estimate  
DoD - Department of Defense  
DSN - Defense Switched Network  
Econ - Economic  
Eng - Engineering  
Est - Estimating  
FMS - Foreign Military Sales  
FY - Fiscal Year  
IOC - Initial Operational Capability  
\$K - Thousands of Dollars  
LRIP - Low Rate Initial Production  
\$M - Millions of Dollars  
MILCON - Military Construction  
N/A - Not Applicable  
O&S - Operating and Support  
Oth - Other  
PAUC - Program Acquisition Unit Cost  
PB - President's Budget  
PE - Program Element  
Proc - Procurement  
Prod Est - Production Estimate  
QR - Quantity Related  
Qty - Quantity  
RDT&E - Research, Development, Test, and Evaluation  
SAR - Selected Acquisition Report  
Sch - Schedule  
Spt - Support  
TBD - To Be Determined  
TY - Then Year  
UCR - Unit Cost Reporting

## Program Information

**Program Name**

Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS)

**DoD Component**

Army

Army is the lead Component per Secretary of Defense Memo dated August 31, 2009. There is no other Service or Joint participation.

## Responsible Office

**Responsible Office**

COL William Wygal  
6007 Combat Drive  
Aberdeen Proving Ground  
Aberdeen, MD 21005  
[william.r.wygal.mil@mail.mil](mailto:william.r.wygal.mil@mail.mil)

**Phone** 443-395-2669  
**Fax** --  
**DSN Phone** 648-2669  
**DSN Fax** --  
**Date Assigned** August 22, 2013

## References

**SAR Baseline (Development Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 14, 2008

**Approved APB**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated October 14, 2008

## Mission and Description

Airborne & Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS) products are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice, data, and video communications for Army aviation platforms. The radios will operate in networks supporting the Common Operational Picture, situational awareness, and interoperability of Mission Command systems throughout the battlefield. AMF JTRS must ensure the soldier's ability to communicate both horizontally and vertically via voice and data within all mission areas and Combat Operational Environments. AMF JTRS helps close capability gaps by extending data networking to company echelons and below, enabling network services to the platform and connecting Army Aviation platforms to Army ground and Joint air network domains. Per Milestone Decision Authority direction, the restructured AMF JTRS Program will procure radios as Non-Developmental Items (NDI).

AMF JTRS will provide two types of NDI radios: the Small Airborne Networking Radio (SANR) and the Small Airborne Link 16 Terminal (SALT). The fielding of SANR will follow the deployment of ground network capabilities. The SANR radio will provide Soldier Radio Waveform (SRW), Single Channel Ground and Airborne Radio System and the Wideband Networking Waveform capability for Army Aviation platforms. SALT will address Joint airborne Link 16 and SRW network requirements by providing Link 16 and SRW capability to the Army Apache aircraft.

## Executive Summary

The AMF JTRS program was restructured in accordance with Milestone Decision Authority (MDA) Acquisition Decision Memoranda (ADM) dated September 12, 2011, May 7, 2012, and July 11, 2012. The July 2012 ADM approved a Non-Developmental Item (NDI) acquisition approach leveraging previous industry investment in tactical radio technology. The restructured AMF JTRS program will procure two NDI radios to meet user needs. The Small Airborne Link 16 Terminal (SALT) radio, will possess Link 16 and Soldier Radio Waveform (SRW) capability. The Small Airborne Networking Radio (SANR) will provide a multi-channel software-defined radio that will support two simultaneous waveform operations consisting of either a Single Channel Ground and Airborne Radio System, SRW, or Wideband Networking Waveform to interoperate with ground forces and maintain connectivity for combat operations.

The MDA has approved an Army Acquisition Executive request to satisfy program requirements with the SALT and SANR radio products. Congressional notification of the Department's intent to establish subprograms for this purpose was issued on July 29, 2013. Initial funding within the SANR program will be used to conduct market research until funding within the Future Years Defense Program (FYDP) (FY 2016 - FY 2020) is restored.

AMF JTRS is currently in the pre-solicitation stage for the SALT procurement. AMF JTRS is developing pre-award documentation in anticipation of an AMF SALT Request for Proposals release in 3<sup>rd</sup> Quarter FY 2014. The SANR solicitation activities are being reassessed as a result of FY 2015 PB controls.

AMF JTRS, in the anticipation of splitting the program into subprograms, has developed two Acquisition Strategies (AS). The SALT AS is in staffing at the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology and is awaiting further guidance before obtaining approval. The SALT AS is expected to be approved in FY 2014. The SANR AS is currently on hold pending restoration of funds.

The SALT solicitation is full and open competition. The SALT NDI procurement is a C-Type (definitive quantity contract) to be awarded to a single vendor. The contract is planned to be comprised of one base year with three options. SANR contract efforts will resume upon restoration of funding within the FYDP (FY 2016 - FY 2020).

On August 20, 2013, a change of charter occurred in which Colonel Russ Wygal assumed command replacing Captain Nigel Nurse. On August 22, 2013, a change of responsibility occurred with Lieutenant Colonel Marcus Varnadore assuming the duties and position of Product Manager of AMF JTRS.

There are no significant software-related issues with this program at this time.

## Threshold Breaches

### APB Breaches

|                     |             |                                     |
|---------------------|-------------|-------------------------------------|
| <b>Schedule</b>     |             | <input checked="" type="checkbox"/> |
| <b>Performance</b>  |             | <input type="checkbox"/>            |
| <b>Cost</b>         | RDT&E       | <input type="checkbox"/>            |
|                     | Procurement | <input type="checkbox"/>            |
|                     | MILCON      | <input type="checkbox"/>            |
|                     | Acq O&M     | <input type="checkbox"/>            |
| <b>O&amp;S Cost</b> |             | <input type="checkbox"/>            |
| <b>Unit Cost</b>    | PAUC        | <input type="checkbox"/>            |
|                     | APUC        | <input type="checkbox"/>            |

### Explanation of Breach

The Maritime/Fixed Station LRIP authorization schedule breach was previously reported in the December 2011 SAR and the Exception SAR in September 2012.

The dates in the current APB are no longer applicable. The breaches to the Milestone C Decision, the Full Rate Production and IOC are due to the restructuring of the program from the System Development and Demonstration contract supporting Army, Air Force and Navy platforms to a Non-Developmental Item procurement approach to support Army Aviation platforms only.

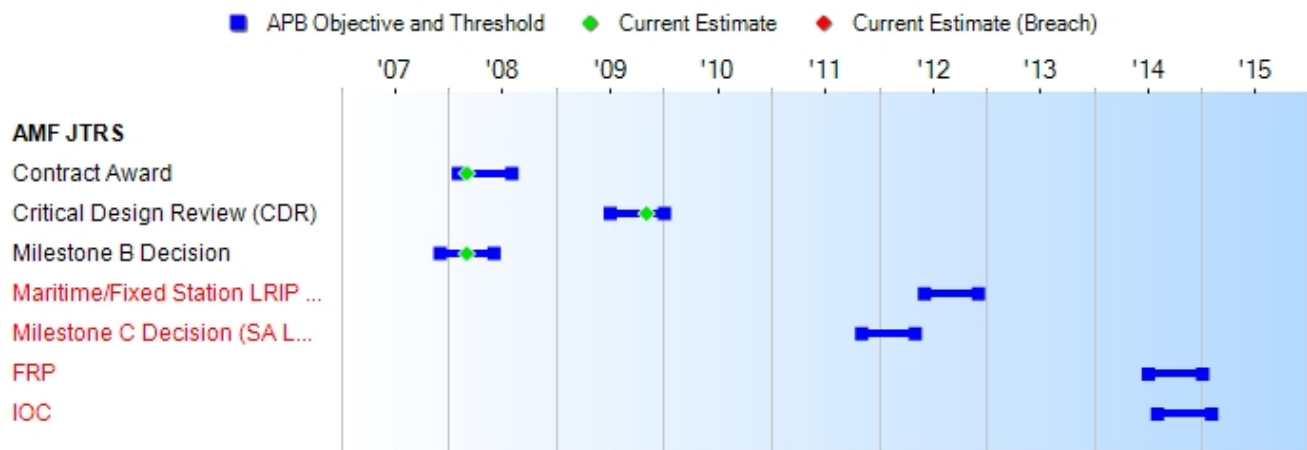
### Nunn-McCurdy Breaches

|                              |      |      |
|------------------------------|------|------|
| <b>Current UCR Baseline</b>  |      |      |
|                              | PAUC | None |
|                              | APUC | None |
| <b>Original UCR Baseline</b> |      |      |
|                              | PAUC | None |
|                              | APUC | None |

An updated proposed APB is pending to rectify the current schedule breach in the system.



## Schedule



| Milestones                                   | SAR Baseline Dev Est | Current APB Development Objective/Threshold |          | Current Estimate |
|--|----------------------|---|----------|------------------|
| Contract Award                               | FEB 2008             | FEB 2008                                    | AUG 2008 | MAR 2008         |
| Critical Design Review (CDR)                 | JUL 2009             | JUL 2009                                    | JAN 2010 | NOV 2009         |
| Milestone B Decision                         | DEC 2007             | DEC 2007                                    | JUN 2008 | MAR 2008         |
| Maritime/Fixed Station LRIP Authorization    | JUN 2012             | JUN 2012                                    | DEC 2012 | N/A <sup>1</sup> |
| Milestone C Decision (SA LRIP Authorization) | NOV 2011             | NOV 2011                                    | MAY 2012 | N/A <sup>1</sup> |
| FRP  | JUL 2014             | JUL 2014                                    | JAN 2015 | N/A <sup>1</sup> |
| IOC  | AUG 2014             | AUG 2014                                    | FEB 2015 | N/A <sup>1</sup> |

<sup>1</sup>APB Breach

### Change Explanations

None

### Memo

The current APB baseline schedule is out of date. Per MDA direction, the Program Office acquisition strategy has been restructured. The restructured strategy is to procure two variations of NDI radios for Airborne platforms. Maritime/Fixed station sites will not be part of the revised procurement.

The breaches to the Milestone C Decision, FRP and IOC are due to the restructuring of the program from the System Development and Demonstration contract supporting Army, Air Force and Navy platforms to an NDI procurement approach to support Army Aviation platforms only.

An updated proposed APB is pending to rectify the current schedule breach in the system.

**Acronyms and Abbreviations**

CDR - Critical Design Review

FRP - Full Rate Production

MDA - Milestone Decision Authority

NDI - Non-Developmental Items

SA - Small Airborne

## Performance

| Characteristics   | SAR Baseline<br>Dev Est  | Current APB<br>Development<br>Objective/Threshold  |  | Demonstrated<br>Performance | Current<br>Estimate |        |
|---|--|--|--|-----------------------------|---------------------|--------|
| Have an internal Growth Capability  | Open system architecture IAW DISR; Modular, Scaleable, Flexible Form Factors   | Open system architecture IAW DISR; Modular, Scaleable, Flexible Form Factors   | Open system architecture IAW DISR; Modular, Scaleable, Flexible Form Factors   | TBD                         | Non Applicable.     | (Ch-1) |
| JTR Set modes/capabilities configuration and reconfiguration via software | By operators in their operational environment  | By operators in their operational environment  | By operators in their operational environment  | TBD                         | Non Applicable.     | (Ch-1) |
| Multi-channel routing and retransmission                                  | Objective waveforms that are in the same mode (voice, data, or video) and use like data rates and operate at permissible security classification levels. | Objective waveforms that are in the same mode (voice, data, or video) and use like data rates and operate at permissible security classification levels. | KPP waveforms that are same in mode (voice, data, or video) and use like data rates and operate at permissible security classification levels. | TBD                         | Non Applicable.     | (Ch-1) |
| Support Waveforms   | Maritime/Fixed; Same as Threshold Small Airborne: Threshold plus UHF SATCOM, SINCGARS, Havequick II, EPLRS   | Maritime/Fixed; Same as Threshold Small Airborne: Threshold plus UHF SATCOM, SINCGARS, Havequick II, EPLRS   | Maritime/Fixed: UHF SATCOM, MUOS Small Airborne: MUOS, SRW, WNW, Link 16   | TBD                         | Non Applicable.     | (Ch-1) |
| Operate on designated number of channels at the same time.                | Airborne 10 Channels Maritime/Fixed (full duplex) 10   | Airborne 10 Channels Maritime/Fixed (full duplex) 10   | Airborne 2 channels Maritime/Fixed (full duplex) 4   | TBD                         | Non Applicable.     | (Ch-1) |

|                                      |   |   |  |     |                 |        |
|--------------------------------------|---|---|--|-----|-----------------|--------|
|                                      | Channels  | Channels  | channels   |     |                 |        |
| Scaleable Networking services        | All Domains.  | All Domains.  | All Domains  | TBD | Non Applicable. | (Ch-1) |
| Network extension/coverage.          | Across organizational boundaries.   | Across organizational boundaries.   | Across organizational boundaries.  | TBD | Non Applicable. | (Ch-1) |
| JTR System network interoperability. | Interoperate with Allied/Coalition and commercial networks; satisfy 100% of top-level IERs. | Interoperate with Allied/Coalition and commercial networks; satisfy 100% of top-level IERs. | Interoperate with Service and Joint networks; satisfy 100% of critical top-level IERs. | TBD | Non Applicable. | (Ch-1) |
| Operational Availability A(o)        | 0.99 (channel)  | 0.99 (channel)  | 0.96 (channel)   | TBD | Non Applicable. | (Ch-1) |

#### Requirements Source

Operational Requirements Document (ORD) 3.2.1 dated August 28, 2006

#### Change Explanations

(Ch-1) The current APB is no longer valid. Per MDA direction, the Program Office acquisition strategy has been restructured to procure radios as Non-Developmental Items.

#### Memo

The current APB represents the Milestone B Acquisition Strategy. A revised CPD is currently in staffing with Training & Doctrine Command and Army Capabilities Integration Center. The Program Office anticipates that a subset of the approved KPPs will apply to the approved CPD. The CPD is currently in formal routing and is expected to be approved in 1st Quarter FY 2015.

An updated proposed APB is pending to rectify the current schedule breach in the system.

**Acronyms and Abbreviations**

A(o) - Operational Availability  
CPD - Capability Production Document  
DISR - DoD Information Technology (IT) Standards Registry  
EPLRS - Enhanced Position Location Reporting System  
IAW - In Accordance With  
IER - Information Exchange Requirement  
JTR - Joint Tactical Radio  
KPP - Key Performance Parameter  
MDA - Milestone Decision Authority  
MUOS - Mobile User Objective System  
ORD - Operational Requirements Document  
SATCOM - Satellite Communication  
SINCGARS - Single Channel Ground and Airborne Radio System  
SRW - Soldier Radio Waveform  
UHF - Ultra High Frequency  
WNW - Wideband Networking Waveform

## Track to Budget

### General Memo

Starting in FY 2014, all AMF JTRS RDT&E funding resides in Army PE 0605380A.

### RDT&E

|           | Appn           | BA | PE   |          |        |
|-----------|----------------|----|--|----------|--------|
| Navy      | 1319           | 05 | 0604280N   |          |        |
|           | <b>Project</b> |    | <b>Name</b>                                      |          |        |
|           | 3073           |    | AMF JTRS   | (Shared) | (Sunk) |
| Army      | 2040           | 05 | 0604280A   |          |        |
|           | <b>Project</b> |    | <b>Name</b>                                      |          |        |
|           | 162            |    | Joint Tactical Radio / Network Enterprise Domain | (Shared) | (Sunk) |
| Army      | 2040           | 05 | 0605380A   |          |        |
|           | <b>Project</b> |    | <b>Name</b>                                      |          |        |
|           | EA9            |    | Airborne Maritime Fixed Small Airborne (AMF-SA)  |          |        |
| Air Force | 3600           | 05 | 0604280F   |          |        |
|           | <b>Project</b> |    | <b>Name</b>                                      |          |        |
|           | 655068         |    | Joint Tactical Radio System (JTRS)               | (Shared) | (Sunk) |

### Procurement

|      | Appn             | BA | PE          |  |  |
|------|------------------|----|-------------|--|--|
| Army | 2035             | 02 | 0204380A    |  |  |
|      | <b>Line Item</b> |    | <b>Name</b> |  |  |
|      | B90902           |    | AMF JTRS    |  |  |

The parent Line Item for the AMF JTRS procurement (B90902) is B90900.

## Cost and Funding

### Cost Summary

#### Total Acquisition Cost and Quantity

| Appropriation  | BY2008 \$M           |   |        | BY2008 \$M       | TY \$M               |                                   |                  |
|----------------|----------------------|---|--------|------------------|----------------------|-----------------------------------|------------------|
|                | SAR Baseline Dev Est | Current APB Development Objective/Threshold |        | Current Estimate | SAR Baseline Dev Est | Current APB Development Objective | Current Estimate |
| RDT&E          | 1850.7               | 1850.7                                      | 2035.8 | 1500.6           | 1941.8               | 1941.8                            | 1554.9           |
| Procurement    | 5907.9               | 5907.9                                      | 6498.7 | 1619.9           | 7092.5               | 7092.5                            | 2399.9           |
| Flyaway        | --                   | --  | --     | 1334.2           | --                   | --                                | 1981.6           |
| Recurring      | --                   | --  | --     | 1334.2           | --                   | --                                | 1981.6           |
| Non Recurring  | --                   | --  | --     | 0.0              | --                   | --                                | 0.0              |
| Support        | --                   | --  | --     | 285.7            | --                   | --                                | 418.3            |
| Other Support  | --                   | --  | --     | 163.3            | --                   | --                                | 235.5            |
| Initial Spares | --                   | --  | --     | 122.4            | --                   | --                                | 182.8            |
| MILCON         | 0.0                  | 0.0   | --     | 0.0              | 0.0                  | 0.0                               | 0.0              |
| Acq O&M        | 0.0                  | 0.0   | --     | 0.0              | 0.0                  | 0.0                               | 0.0              |
| Total          | 7758.6               | 7758.6                                      | N/A    | 3120.5           | 9034.3               | 9034.3                            | 3954.8           |

Costs do not reflect platform installation and integration funding. Army requirements by platform and year, including installation and integration of the AMF JTRS on host platforms, are documented separately.

| Quantity    | SAR Baseline Dev Est | Current APB Development | Current Estimate |
|-------------|----------------------|-------------------------|------------------|
| RDT&E       | 224                  | 224                     | 212              |
| Procurement | 26878                | 26878                   | 15440            |
| Total       | 27102                | 27102                   | 15652            |

Fielding plan and procurement funding are based on current Army requirements of 690 Small Airborne Link 16 Terminals (SALT) (1,380 channels) and 7,030 Small Airborne Networking Radios (SANR) (14,060 channels) for a total of 7,720 AMF JTRS radios (15,440 channels).

RDT&E unit quantities of 20 SALT and 192 SANR channels reflect planned deliveries to the Army for integration onto platforms. These numbers do not include units required for testing.

AMF JTRS PAUC and APUC measures are per channel. Quantities are channels with the assumption of two channels per radio.

## Cost and Funding

### Funding Summary

#### Appropriation and Quantity Summary FY2015 President's Budget / December 2013 SAR (TY\$ M)

| Appropriation | Prior  | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | To Complete | Total  |
|---------------|--------|--------|--------|--------|--------|--------|--------|-------------|--------|
| RDT&E         | 1425.3 | 10.2   | 6.9    | 12.3   | 0.0    | 0.0    | 0.0    | 100.2       | 1554.9 |
| Procurement   | 0.0    | 0.0    | 0.0    | 15.5   | 23.7   | 19.0   | 20.0   | 2321.7      | 2399.9 |
| MILCON        | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    |
| Acq O&M       | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0         | 0.0    |
| PB 2015 Total | 1425.3 | 10.2   | 6.9    | 27.8   | 23.7   | 19.0   | 20.0   | 2421.9      | 3954.8 |
| PB 2014 Total | 1682.4 | 33.2   | 73.4   | 186.4  | 158.8  | 160.8  | 219.5  | 1245.4      | 3759.9 |
| Delta         | -257.1 | -23.0  | -66.5  | -158.6 | -135.1 | -141.8 | -199.5 | 1176.5      | 194.9  |

Small Airborne Networking Radio funding and quantities are deferred beyond the Future Years Defense Program FY 2015 - FY 2019.

| Quantity      | Undistributed | Prior | FY2014 | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | To Complete | Total |
|---------------|---------------|-------|--------|--------|--------|--------|--------|--------|-------------|-------|
| Development   | 212           | 0     | 0      | 0      | 0      | 0      | 0      | 0      | 0           | 212   |
| Production    | 0             | 0     | 0      | 0      | 48     | 96     | 56     | 48     | 15192       | 15440 |
| PB 2015 Total | 212           | 0     | 0      | 0      | 48     | 96     | 56     | 48     | 15192       | 15652 |
| PB 2014 Total | 212           | 220   | 0      | 48     | 1598   | 1188   | 1204   | 1924   | 9258        | 15652 |
| Delta         | 0             | -220  | 0      | -48    | -1550  | -1092  | -1148  | -1876  | 5934        | 0     |



## Cost and Funding

### Annual Funding By Appropriation

#### Annual Funding TY\$

#### 1319 | RDT&E | Research, Development, Test, and Evaluation, Navy

| Fiscal Year     | Quantity | End Item Recurring Flyaway TY \$M | Non End Item Recurring Flyaway TY \$M | Non Recurring Flyaway TY \$M | Total Flyaway TY \$M | Total Support TY \$M | Total Program TY \$M |
|-----------------|----------|-----------------------------------|---------------------------------------|------------------------------|----------------------|----------------------|----------------------|
| 2003            | --       | --                                | --                                    | --                           | --                   | --                   | 8.4                  |
| 2004            | --       | --                                | --                                    | --                           | --                   | --                   | 43.0                 |
| 2005            | --       | --                                | --                                    | --                           | --                   | --                   | 54.3                 |
| 2006            | --       | --                                | --                                    | --                           | --                   | --                   | 55.9                 |
| 2007            | --       | --                                | --                                    | --                           | --                   | --                   | 56.3                 |
| 2008            | --       | --                                | --                                    | --                           | --                   | --                   | 99.8                 |
| 2009            | --       | --                                | --                                    | --                           | --                   | --                   | 212.6                |
| 2010            | --       | --                                | --                                    | --                           | --                   | --                   | 304.7                |
| 2011            | --       | --                                | --                                    | --                           | --                   | --                   | 304.8                |
| 2012            | --       | --                                | --                                    | --                           | --                   | --                   | 122.2                |
| 2013            | --       | --                                | --                                    | --                           | --                   | --                   | 9.2                  |
| <b>Subtotal</b> | --       | --                                | --                                    | --                           | --                   | --                   | <b>1271.2</b>        |

**Annual Funding BY\$****1319 | RDT&E | Research, Development, Test, and Evaluation, Navy**

| <b>Fiscal Year</b> | <b>Quantity</b> | <b>End Item<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Non End<br/>Item<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Non<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Total<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Total<br/>Support<br/>BY 2008 \$M</b> | <b>Total<br/>Program<br/>BY 2008 \$M</b> |
|--------------------|-----------------|---|---|--|--|--|--|
| 2003               | --              | --  | --  | --   | --                                       | --                                       | 9.4                                      |
| 2004               | --              | --  | --  | --   | --                                       | --                                       | 47.0                                     |
| 2005               | --              | --  | --  | --   | --                                       | --                                       | 57.8                                     |
| 2006               | --              | --  | --  | --   | --                                       | --                                       | 57.7                                     |
| 2007               | --              | --  | --  | --   | --                                       | --                                       | 56.7                                     |
| 2008               | --              | --  | --  | --   | --                                       | --                                       | 98.8                                     |
| 2009               | --              | --  | --  | --   | --                                       | --                                       | 207.7                                    |
| 2010               | --              | --  | --  | --   | --                                       | --                                       | 293.3                                    |
| 2011               | --              | --  | --  | --   | --                                       | --                                       | 286.4                                    |
| 2012               | --              | --  | --  | --   | --                                       | --                                       | 112.9                                    |
| 2013               | --              | --  | --  | --   | --                                       | --                                       | 8.4                                      |
| <b>Subtotal</b>    | --              | --  | --  | --   | --                                       | --                                       | <b>1236.1</b>                            |

Twenty-six Small Airborne Channels previously reported as delivered under the System Development and Demonstration contract, which has since been closed out as directed in the May 7, 2012 Acquisition Decision Memorandum cannot be considered "fully-configured" and are not included in our current RDT&E quantities.

All RDT&E funding and associated channels prior to FY 2014 were transferred to Navy PE 0604280N in each execution year, consistent with the JTRS Joint Program Acquisition Strategy. Starting in FY 2014, all AMF JTRS RDT&E funding resides in Army PE 0605380A.

**Annual Funding TY\$****3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force**

| <b>Fiscal Year</b> | <b>Quantity</b> | <b>End Item<br/>Recurring<br/>Flyaway<br/>TY \$M</b> | <b>Non End<br/>Item<br/>Recurring<br/>Flyaway<br/>TY \$M</b> | <b>Non<br/>Recurring<br/>Flyaway<br/>TY \$M</b> | <b>Total<br/>Flyaway<br/>TY \$M</b> | <b>Total<br/>Support<br/>TY \$M</b> | <b>Total<br/>Program<br/>TY \$M</b> |
|--------------------|-----------------|--|--|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 2003               | --              | --   | --   | --  | --                                  | --                                  | 12.8                                |
| 2004               | --              | --   | --   | --  | --                                  | --                                  | 28.1                                |
| 2005               | --              | --   | --   | --  | --                                  | --                                  | 36.1                                |
| 2006               | --              | --   | --   | --  | --                                  | --                                  | 77.1                                |
| <b>Subtotal</b>    | --              | --   | --   | --  | --                                  | --                                  | <b>154.1</b>                        |

**Annual Funding BY\$****3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force**

| <b>Fiscal Year</b> | <b>Quantity</b> | <b>End Item<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Non End<br/>Item<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Non<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Total<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Total<br/>Support<br/>BY 2008 \$M</b> | <b>Total<br/>Program<br/>BY 2008 \$M</b> |
|--------------------|-----------------|---|---|--|--|--|--|
| 2003               | --              | --  | --  | --   | --                                       | --                                       | 14.4                                     |
| 2004               | --              | --  | --  | --   | --                                       | --                                       | 30.8                                     |
| 2005               | --              | --  | --  | --   | --                                       | --                                       | 38.6                                     |
| 2006               | --              | --  | --  | --   | --                                       | --                                       | 80.0                                     |
| <b>Subtotal</b>    | --              | --  | --  | --   | --                                       | --                                       | <b>163.8</b>                             |

## Annual Funding TY\$

## 2040 | RDT&amp;E | Research, Development, Test, and Evaluation, Army

| Fiscal Year     | Quantity   | End Item<br>Recurring<br>Flyaway<br>TY \$M | Non End<br>Item<br>Recurring<br>Flyaway<br>TY \$M | Non<br>Recurring<br>Flyaway<br>TY \$M | Total<br>Flyaway<br>TY \$M | Total<br>Support<br>TY \$M | Total<br>Program<br>TY \$M |
|-----------------|------------|--|---|---------------------------------------|----------------------------|----------------------------|----------------------------|
| 2014            | --         | --   | --  | --                                    | --                         | --                         | 10.2                       |
| 2015            | --         | --   | --  | --                                    | --                         | --                         | 6.9                        |
| 2016            | --         | --   | --  | --                                    | --                         | --                         | 12.3                       |
| 2017            | --         | --   | --  | --                                    | --                         | --                         | --                         |
| 2018            | --         | --   | --  | --                                    | --                         | --                         | --                         |
| 2019            | --         | --   | --  | --                                    | --                         | --                         | --                         |
| 2020            | --         | --   | --  | --                                    | --                         | --                         | 5.7                        |
| 2021            | --         | --   | --  | --                                    | --                         | --                         | 7.2                        |
| 2022            | --         | --   | --  | --                                    | --                         | --                         | 43.9                       |
| 2023            | --         | --   | --  | --                                    | --                         | --                         | 37.1                       |
| 2024            | --         | --   | --  | --                                    | --                         | --                         | 6.3                        |
| <b>Subtotal</b> | <b>212</b> | --   | --  | --                                    | --                         | --                         | <b>129.6</b>               |

**Annual Funding BY\$****2040 | RDT&E | Research, Development, Test, and Evaluation, Army**

| <b>Fiscal Year</b> | <b>Quantity</b> | <b>End Item<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Non End<br/>Item<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Non<br/>Recurring<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Total<br/>Flyaway<br/>BY 2008 \$M</b> | <b>Total<br/>Support<br/>BY 2008 \$M</b> | <b>Total<br/>Program<br/>BY 2008 \$M</b> |
|--------------------|-----------------|---|---|--|--|--|--|
| 2014               | --              | --  | --  | --   | --                                       | --                                       | 9.0                                      |
| 2015               | --              | --  | --  | --   | --                                       | --                                       | 6.0                                      |
| 2016               | --              | --  | --  | --   | --                                       | --                                       | 10.5                                     |
| 2017               | --              | --  | --  | --   | --                                       | --                                       | --                                       |
| 2018               | --              | --  | --  | --   | --                                       | --                                       | --                                       |
| 2019               | --              | --  | --  | --   | --                                       | --                                       | --                                       |
| 2020               | --              | --  | --  | --   | --                                       | --                                       | 4.5                                      |
| 2021               | --              | --  | --  | --   | --                                       | --                                       | 5.5                                      |
| 2022               | --              | --  | --  | --   | --                                       | --                                       | 33.1                                     |
| 2023               | --              | --  | --  | --   | --                                       | --                                       | 27.5                                     |
| 2024               | --              | --  | --  | --   | --                                       | --                                       | 4.6                                      |
| <b>Subtotal</b>    | <b>212</b>      | --  | --  | --   | --                                       | --                                       | <b>100.7</b>                             |

RDT&E-funded units reflect planned deliveries to the Army of 20 Small Airborne Link 16 Terminal channels (10 radios) and 192 Small Airborne Networking Radio (SANR) channels (96 radios) for integration onto platforms. These numbers do not include units for testing.

SANR funding and quantities are deferred beyond the Future Years Defense Program FY 2015 - FY 2019.

**Annual Funding TY\$****2035 | Procurement | Other Procurement, Army**

| <b>Fiscal Year</b> | <b>Quantity</b> | <b>End Item<br/>Recurring<br/>Flyaway<br/>TY \$M</b> | <b>Non End<br/>Item<br/>Recurring<br/>Flyaway<br/>TY \$M</b> | <b>Non<br/>Recurring<br/>Flyaway<br/>TY \$M</b> | <b>Total<br/>Flyaway<br/>TY \$M</b> | <b>Total<br/>Support<br/>TY \$M</b> | <b>Total<br/>Program<br/>TY \$M</b> |
|--------------------|-----------------|--|--|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 2016               | 48              | 10.1   | --   | --  | 10.1                                | 5.4                                 | 15.5                                |
| 2017               | 96              | 17.3   | --   | --  | 17.3                                | 6.4                                 | 23.7                                |
| 2018               | 56              | 12.2   | --   | --  | 12.2                                | 6.8                                 | 19.0                                |
| 2019               | 48              | 11.4   | --   | --  | 11.4                                | 8.6                                 | 20.0                                |
| 2020               | 192             | 27.7   | --   | --  | 27.7                                | 6.5                                 | 34.2                                |
| 2021               | 192             | 26.6   | --   | --  | 26.6                                | 7.0                                 | 33.6                                |
| 2022               | 192             | 27.1   | --   | --  | 27.1                                | 7.2                                 | 34.3                                |
| 2023               | 282             | 44.1   | --   | --  | 44.1                                | 17.4                                | 61.5                                |
| 2024               | 786             | 100.7  | --   | --  | 100.7                               | 27.2                                | 127.9                               |
| 2025               | 1136            | 140.1  | --   | --  | 140.1                               | 34.7                                | 174.8                               |
| 2026               | 1700            | 206.2  | --   | --  | 206.2                               | 51.8                                | 258.0                               |
| 2027               | 2028            | 241.4  | --   | --  | 241.4                               | 45.3                                | 286.7                               |
| 2028               | 2032            | 246.8  | --   | --  | 246.8                               | 36.0                                | 282.8                               |
| 2029               | 1656            | 206.8  | --   | --  | 206.8                               | 33.0                                | 239.8                               |
| 2030               | 1564            | 199.7  | --   | --  | 199.7                               | 31.6                                | 231.3                               |
| 2031               | 1200            | 158.5  | --   | --  | 158.5                               | 26.8                                | 185.3                               |
| 2032               | 1196            | 161.2  | --   | --  | 161.2                               | 27.0                                | 188.2                               |
| 2033               | 1036            | 143.7  | --   | --  | 143.7                               | 24.7                                | 168.4                               |
| 2034               | --              | --   | --   | --  | --                                  | 14.9                                | 14.9                                |
| <b>Subtotal</b>    | <b>15440</b>    | <b>1981.6</b>  | <b>--</b>  | <b>--</b>                                       | <b>1981.6</b>                       | <b>418.3</b>                        | <b>2399.9</b>                       |

**Annual Funding BY\$****2035 | Procurement | Other Procurement, Army**

| <b>Fiscal Year</b> | <b>Quantity</b> | <b>End Item Recurring Flyaway BY 2008 \$M</b> | <b>Non End Item Recurring Flyaway BY 2008 \$M</b> | <b>Non Recurring Flyaway BY 2008 \$M</b> | <b>Total Flyaway BY 2008 \$M</b> | <b>Total Support BY 2008 \$M</b> | <b>Total Program BY 2008 \$M</b> |
|--------------------|-----------------|---|---|--|----------------------------------|----------------------------------|----------------------------------|
| 2016               | 48              | 8.6   | --  | --                                       | 8.6                              | 4.6                              | 13.2                             |
| 2017               | 96              | 14.4  | --  | --                                       | 14.4                             | 5.3                              | 19.7                             |
| 2018               | 56              | 10.0  | --  | --                                       | 10.0                             | 5.5                              | 15.5                             |
| 2019               | 48              | 9.1   | --  | --                                       | 9.1                              | 6.9                              | 16.0                             |
| 2020               | 192             | 21.7  | --  | --                                       | 21.7                             | 5.1                              | 26.8                             |
| 2021               | 192             | 20.4  | --  | --                                       | 20.4                             | 5.4                              | 25.8                             |
| 2022               | 192             | 20.4  | --  | --                                       | 20.4                             | 5.4                              | 25.8                             |
| 2023               | 282             | 32.6  | --  | --                                       | 32.6                             | 12.8                             | 45.4                             |
| 2024               | 786             | 72.9  | --  | --                                       | 72.9                             | 19.7                             | 92.6                             |
| 2025               | 1136            | 99.5  | --  | --                                       | 99.5                             | 24.6                             | 124.1                            |
| 2026               | 1700            | 143.6   | --  | --                                       | 143.6                            | 36.0                             | 179.6                            |
| 2027               | 2028            | 164.8   | --  | --                                       | 164.8                            | 30.9                             | 195.7                            |
| 2028               | 2032            | 165.2   | --  | --                                       | 165.2                            | 24.1                             | 189.3                            |
| 2029               | 1656            | 135.7   | --  | --                                       | 135.7                            | 21.6                             | 157.3                            |
| 2030               | 1564            | 128.5   | --  | --                                       | 128.5                            | 20.3                             | 148.8                            |
| 2031               | 1200            | 100.0   | --  | --                                       | 100.0                            | 16.9                             | 116.9                            |
| 2032               | 1196            | 99.7  | --  | --                                       | 99.7                             | 16.7                             | 116.4                            |
| 2033               | 1036            | 87.1  | --  | --                                       | 87.1                             | 15.0                             | 102.1                            |
| 2034               | --              | --  | --  | --                                       | --                               | 8.9                              | 8.9                              |
| <b>Subtotal</b>    | <b>15440</b>    | <b>1334.2</b>                                 | <b>--</b>   | <b>--</b>                                | <b>1334.2</b>                    | <b>285.7</b>                     | <b>1619.9</b>                    |

Costs do not reflect platform installation and integration funding. Army requirements by platform and year, including installation and integration of AMF JTRS radios onto host platforms, are documented separately.

Future Years Defense Program (FYDP, FY 2015 – FY 2019) only represents Small Airborne Link 16 Terminal (SALT) radios. The SALT quantities within the FYDP FY 2015 – FY 2019 are adjusted to available funding. FY 2020 and beyond SALT quantities are adjusted to reflect total Army requirements.

Small Airborne Networking Radio (SANR) funding and quantities are deferred beyond the Future Years Defense Program FY 2015 - FY 2019.

Quantities are channels with the assumption of two channels per radio.



Channel and radio quantities in accordance with planned funding are:

Total Channels -- 15,440 (1,380 SALT and 14,060 SANR)

Total Radios -- 7,720 (690 SALT and 7,030 SANR)

FY 2034 procurement funding is for costs associated with fielding of quantities procured in FY 2033.

## **Low Rate Initial Production**

There is no LRIP for this Program.

## Foreign Military Sales

### Foreign Military Sales (FMS)

The AMF JTRS Program Office (PO) received a \$60M reduction in FY 2011 that eliminated all funding for International Cooperation and FMS. There are currently no cases open with the PO and no plans for FMS exchanges with the program in the future. The PO will revisit FMS and Coalition Interoperability issues at a later date should funds become available.

AMF JTRS currently does not have any Memorandums of Agreement (MOAs) in place with foreign governments or cognizant organizations. In addition, other Coalition waveforms (e.g. Bowman Waveform) are currently unfunded and not planned to be supported at this time.

### Coalition Interoperability

AMF JTRS has an objective requirement to include AMF JTRS Non-Development Item interoperability with Allied/Coalition networks.

AMF JTRS is procuring Link 16 capability for the Apache Program. The PO and contractors will maintain International Link 16 standards to ensure Coalition interoperability. AMF JTRS currently does not have any MOAs in place with foreign governments or cognizant organizations. Other coalition waveforms, such as the Bowman waveform, are currently unfunded and not planned to be supported at this time.

## Nuclear Costs

None

**Unit Cost****Unit Cost Report**

|           | BY2008 \$M                                | BY2008 \$M                         |                |
|-----------|---|------------------------------------|----------------|
| Unit Cost | Current UCR<br>Baseline<br>(OCT 2008 APB) | Current Estimate<br>(DEC 2013 SAR) | BY<br>% Change |

## Program Acquisition Unit Cost (PAUC)

|           |        |        |        |
|-----------|--------|--------|--------|
| Cost      | 7758.6 | 3120.5 |        |
| Quantity  | 27102  | 15652  |        |
| Unit Cost | 0.286  | 0.199  | -30.42 |

## Average Procurement Unit Cost (APUC)

|           |        |        |        |
|-----------|--------|--------|--------|
| Cost      | 5907.9 | 1619.9 |        |
| Quantity  | 26878  | 15440  |        |
| Unit Cost | 0.220  | 0.105  | -52.27 |

|           | BY2008 \$M                                 | BY2008 \$M                         |                |
|-----------|--|------------------------------------|----------------|
| Unit Cost | Original UCR<br>Baseline<br>(OCT 2008 APB) | Current Estimate<br>(DEC 2013 SAR) | BY<br>% Change |

## Program Acquisition Unit Cost (PAUC)

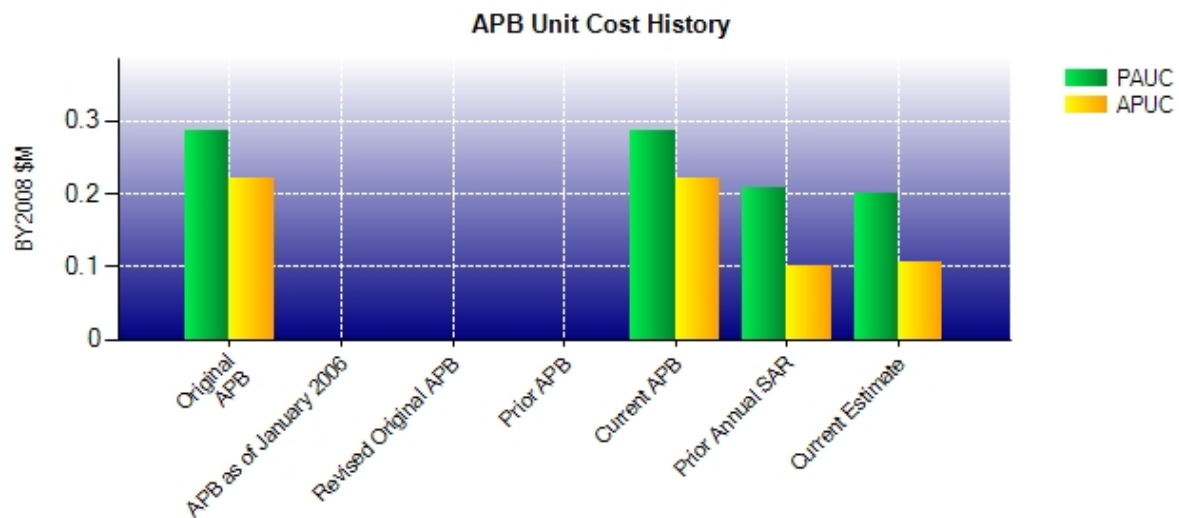
|           |        |        |        |
|-----------|--------|--------|--------|
| Cost      | 7758.6 | 3120.5 |        |
| Quantity  | 27102  | 15652  |        |
| Unit Cost | 0.286  | 0.199  | -30.42 |

## Average Procurement Unit Cost (APUC)

|           |        |        |        |
|-----------|--------|--------|--------|
| Cost      | 5907.9 | 1619.9 |        |
| Quantity  | 26878  | 15440  |        |
| Unit Cost | 0.220  | 0.105  | -52.27 |

AMF JTRS PAUC and APUC calculations are per channel.

## Unit Cost History



|                        | Date     | BY2008 \$M |       | TY \$M |       |
|------------------------|----------|------------|-------|--------|-------|
|                        |          | PAUC       | APUC  | PAUC   | APUC  |
| Original APB           | OCT 2008 | 0.286      | 0.220 | 0.333  | 0.264 |
| APB as of January 2006 | N/A      | N/A        | N/A   | N/A    | N/A   |
| Revised Original APB   | N/A      | N/A        | N/A   | N/A    | N/A   |
| Prior APB              | N/A      | N/A        | N/A   | N/A    | N/A   |
| Current APB            | OCT 2008 | 0.286      | 0.220 | 0.333  | 0.264 |
| Prior Annual SAR       | DEC 2012 | 0.207      | 0.102 | 0.240  | 0.131 |
| Current Estimate       | DEC 2013 | 0.199      | 0.105 | 0.253  | 0.155 |

## SAR Unit Cost History

### Current SAR Baseline to Current Estimate (TY \$M)

| Initial PAUC<br>Dev Est | Changes |       |       |       |        |       |       |        | PAUC<br>Current Est |
|-------------------------|---------|-------|-------|-------|--------|-------|-------|--------|---------------------|
|                         | Econ    | Qty   | Sch   | Eng   | Est    | Oth   | Spt   | Total  |                     |
| 0.333                   | -0.002  | 0.056 | 0.022 | 0.001 | -0.181 | 0.000 | 0.024 | -0.080 | 0.253               |

**Current SAR Baseline to Current Estimate (TY \$M)**

| Initial APUC<br>Dev Est | Changes |       |       |       |        |       |       |        | APUC<br>Current Est |
|-------------------------|---------|-------|-------|-------|--------|-------|-------|--------|---------------------|
|                         | Econ    | Qty   | Sch   | Eng   | Est    | Oth   | Spt   | Total  |                     |
| 0.264                   | -0.001  | 0.006 | 0.032 | 0.000 | -0.171 | 0.000 | 0.025 | -0.109 | 0.155               |

**SAR Baseline History**

| Item/Event                  | SAR<br>Planning<br>Estimate (PE) | SAR<br>Development<br>Estimate (DE) | SAR<br>Production<br>Estimate (PdE) | Current<br>Estimate |
|-----------------------------|----------------------------------|-------------------------------------|-------------------------------------|---------------------|
| Milestone A                 | N/A                              | N/A                                 | N/A                                 | N/A                 |
| Milestone B                 | N/A                              | DEC 2007                            | N/A                                 | MAR 2008            |
| Milestone C                 | N/A                              | NOV 2011                            | N/A                                 | N/A                 |
| IOC                         | N/A                              | AUG 2014                            | N/A                                 | N/A                 |
| Total Cost (TY \$M)         | N/A                              | 9034.3                              | N/A                                 | 3954.8              |
| Total Quantity              | N/A                              | 27102                               | N/A                                 | 15652               |
| Prog. Acq. Unit Cost (PAUC) | N/A                              | 0.333                               | N/A                                 | 0.253               |

**Cost Variance**

| <b>Summary Then Year \$M</b> |                  |             |               |              |
|------------------------------|------------------|-------------|---------------|--------------|
|                              | <b>RDT&amp;E</b> | <b>Proc</b> | <b>MILCON</b> | <b>Total</b> |
| SAR Baseline (Dev Est)       | 1941.8           | 7092.5      | --            | 9034.3       |
| Previous Changes             |                  |             |               |              |
| Economic                     | -22.5            | +5.8        | --            | -16.7        |
| Quantity                     | -29.3            | -2913.1     | --            | -2942.4      |
| Schedule                     | --               | +208.6      | --            | +208.6       |
| Engineering                  | +13.5            | --          | --            | +13.5        |
| Estimating                   | -170.8           | -2638.3     | --            | -2809.1      |
| Other                        | --               | --          | --            | --           |
| Support                      | --               | +271.7      | --            | +271.7       |
| Subtotal                     | -209.1           | -5065.3     | --            | -5274.4      |
| Current Changes              |                  |             |               |              |
| Economic                     | -3.2             | -14.0       | --            | -17.2        |
| Quantity                     | --               | --          | --            | --           |
| Schedule                     | -154.0           | +284.8      | --            | +130.8       |
| Engineering                  | --               | --          | --            | --           |
| Estimating                   | -20.6            | -8.7        | --            | -29.3        |
| Other                        | --               | --          | --            | --           |
| Support                      | --               | +110.6      | --            | +110.6       |
| Subtotal                     | -177.8           | +372.7      | --            | +194.9       |
| Total Changes                | -386.9           | -4692.6     | --            | -5079.5      |
| CE - Cost Variance           | 1554.9           | 2399.9      | --            | 3954.8       |
| CE - Cost & Funding          | 1554.9           | 2399.9      | --            | 3954.8       |

| Summary Base Year 2008 \$M |        |         |        |         |
|----------------------------|--------|---------|--------|---------|
|                            | RDT&E  | Proc    | MILCON | Total   |
| SAR Baseline (Dev Est)     | 1850.7 | 5907.9  | --     | 7758.6  |
| Previous Changes           |        |         |        |         |
| Economic                   | --     | --      | --     | --      |
| Quantity                   | -27.2  | -2477.0 | --     | -2504.2 |
| Schedule                   | --     | +25.9   | --     | +25.9   |
| Engineering                | +12.1  | --      | --     | +12.1   |
| Estimating                 | -162.5 | -2128.4 | --     | -2290.9 |
| Other                      | --     | --      | --     | --      |
| Support                    | --     | +239.8  | --     | +239.8  |
| Subtotal                   | -177.6 | -4339.7 | --     | -4517.3 |
| Current Changes            |        |         |        |         |
| Economic                   | --     | --      | --     | --      |
| Quantity                   | --     | --      | --     | --      |
| Schedule                   | -154.5 | --      | --     | -154.5  |
| Engineering                | --     | --      | --     | --      |
| Estimating                 | -18.0  | +5.8    | --     | -12.2   |
| Other                      | --     | --      | --     | --      |
| Support                    | --     | +45.9   | --     | +45.9   |
| Subtotal                   | -172.5 | +51.7   | --     | -120.8  |
| Total Changes              | -350.1 | -4288.0 | --     | -4638.1 |
| CE - Cost Variance         | 1500.6 | 1619.9  | --     | 3120.5  |
| CE - Cost & Funding        | 1500.6 | 1619.9  | --     | 3120.5  |

Previous Estimate: December 2012



| <b>RDT&amp;E</b>  | <b>\$M</b>       |                  |
|---|------------------|------------------|
|   | <b>Base Year</b> | <b>Then Year</b> |
| <b>Current Change Explanations</b>  |                  |                  |
| Revised escalation indices. (Economic)  | N/A              | -3.2             |
| Adjustment for current and prior escalation. (Estimating)   | +2.3             | +2.4             |
| Funding reduction due to the FY 2014 Omnibus Appropriations Act (Army). (Estimating)  | -20.3            | -23.0            |
| Net increase due to the deferral of the Small Airborne Network Radio beyond the Future Years Defense Program FY 2015 - FY 2019 (Army). (Schedule)             | +13.8            | +29.1            |
| Reductions in FY 2012 and FY 2013 to reflect funding received due to a change in acquisition strategy to a Non-Developmental Item approach (Navy). (Schedule) | -168.3           | -183.1           |
| <b>RDT&amp;E Subtotal</b>   | <b>-172.5</b>    | <b>-177.8</b>    |

| <b>Procurement</b>  | <b>\$M</b>       |                  |
|---|------------------|------------------|
|   | <b>Base Year</b> | <b>Then Year</b> |
| <b>Current Change Explanations</b>  |                  |                  |
| Revised escalation indices. (Economic)  | N/A              | -14.0            |
| Adjustment for current and prior escalation. (Estimating)   | +0.4             | +0.5             |
| Decrease due to elimination of incorrect FY 2013 prior-to-need procurement dollars and quantities (Army). (Estimating)  | -19.2            | -17.9            |
| Increase in program management costs due to decreased sharing of personnel resulting from the deferral of Small Airborne Networking Radio (SANR) beyond the Future Years Defense Program (FYDP) FY 2015 - FY 2019 (Army). (Estimating)  | +24.6            | +8.7             |
| Stretch-out of procurement buy profile by seven years due to the deferral of SANR beyond the FYDP FY 2015 - FY 2019 (Army). (Schedule)  | 0.0              | +284.8           |
| Adjustment for current and prior escalation. (Support)  | +0.3             | +0.3             |
| Increase in support due to addition of contractor data and fielding support costs identified by independent government cost estimates; additional new equipment training classes required to train all operators and maintainers rather than just the trainers; and increase in procurement-funded field maintenance civilian labor (Army). (Support) | +35.8            | +75.5            |
| Increase in initial spares due to inclusion of overhead costs (Army). (Support)   | +9.8             | +34.8            |
| <b>Procurement Subtotal</b>   | <b>+51.7</b>     | <b>+372.7</b>    |

## Contracts

### General Contract Memo

There are no active contracts greater than \$40M.

## Deliveries and Expenditures

| Delivered to Date                | Plan to Date | Actual to Date | Total Quantity | Percent Delivered |
|----------------------------------|--------------|----------------|----------------|-------------------|
| Development                      | 0            | 0              | 212            | 0.00%             |
| Production                       | 0            | 0              | 15440          | 0.00%             |
| Total Program Quantity Delivered | 0            | 0              | 15652          | 0.00%             |

| Expended and Appropriated (TY \$M) |        |                            |        |
|------------------------------------|--------|----------------------------|--------|
| Total Acquisition Cost             | 3954.8 | Years Appropriated         | 12     |
| Expended to Date                   | 1359.4 | Percent Years Appropriated | 37.50% |
| Percent Expended                   | 34.37% | Appropriated to Date       | 1435.5 |
| Total Funding Years                | 32     | Percent Appropriated       | 36.30% |

The above data is current as of 3/18/2014.

Expenditures consist of appropriated funds disbursed through March 18, 2014. Twenty-six Small Airborne Channels were previously reported as delivered under the closed out Lockheed Martin System Development and Demonstration contract, which has since been closed out as directed in the May 7, 2012 Acquisition Decision Memorandum. These previously reported quantities cannot be considered "fully-configured" and are not included in our current RDT&E quantities. Total Expended to Date stated in Dec 2012 SAR was an incorrect amount. Therefore, AMF JTRS conducted an analysis of expenditures based on available records for a more accurate AMF JTRS Total Expended to Date for this SAR submission.

## Operating and Support Cost

### AMF JTRS

#### Assumptions and Ground Rules

##### Cost Estimate Reference:

O&S Costs are based on the Program Office Estimate (POE) dated February 21, 2014.

##### Sustainment Strategy:

O&S costs are based on the procurement of 7,720 two-channel radios, each with a 20-year estimated service life.

No significant issues to report. The project is currently in the pre-Request for Proposal stage. The Program Office will conduct an in-depth assessment of risks to logistics and training as information on the product becomes available.

The Program Office will execute a step approach to contracting for a Performance Based Logistics (PBL) solution to be initiated after the Full-Rate Production (FRP) decision. Initial procurement of test/integration units is planned to come with a one-year warranty and Interim Contract Support at contract award. The Program Office plans to conduct a Business Case Analysis using actual cost, usage, and turn-around times before FRP. This approach will facilitate transition to full PBL implementation with greater understanding of requirements, more effective metrics, and greater cost fidelity. Depot Source of Repair Analysis will also be conducted prior to Milestone C. The training concept is being jointly developed by the Program Executive Office for Command, Control, and Communications - Tactical, Project Manager Tactical Radios, Product Manager AMF JTRS, the Army Training and Doctrine Command Training Directorate and Army Aviation and will include a System Training Plan that will accompany the validated requirements document.

##### Antecedent Information:

There is no antecedent to this program. AMF JTRS radios are software programmable, multi-band, multi-mode, mobile ad hoc networking radios, providing simultaneous voice, data, and video communications, and which may be employed in new and innovative ways as compared to any currently fielded legacy radio.

| Unitized O&S Costs BY2008 \$K  |                         |                                   |
|--------------------------------|-------------------------|-----------------------------------|
| Cost Element                   | AMF JTRS<br>per Channel | No Antecedent (Antecedent)<br>N/A |
| Unit-Level Manpower            | 0.000                   | --                                |
| Unit Operations                | 0.000                   | --                                |
| Maintenance                    | 7.162                   | --                                |
| Sustaining Support             | 3.216                   | --                                |
| Continuing System Improvements | 0.363                   | --                                |
| Indirect Support               | 0.000                   | --                                |
| Other                          | 0.000                   | --                                |
| Total                          | 10.741                  | --                                |

##### Unitized Cost Comments:

O&S Unit Costs are based on the POE dated February 21, 2014. The Unit of Measure is per channel. The Annual Unit Cost is calculated as \$3,316.8 Total O&S Base Year Cost /15,440 channels/20-years.

|                  | Total O&S Cost \$M                             |         |                  |                               |
|------------------|--|---------|------------------|-------------------------------|
|                  | Current Development APB<br>Objective/Threshold |         | Current Estimate |                               |
|                  | AMF JTRS                                       |         | AMF JTRS         | No Antecedent<br>(Antecedent) |
| <b>Base Year</b> | 22660.0  | 24926.0 | 3316.8           | N/A                           |
| <b>Then Year</b> | 36135.7  | N/A     | 6065.4           | N/A                           |

Total O&S Costs Comments:

| O&S Cost Variance                           |                    |   |
|---|--------------------|---|
| Category                                    | Base Year 2008 \$M | Change Explanation  |
| Prior SAR Total O&S<br>Estimate -- Dec 2012 | 3,346.8            |   |
| Cost Estimating Methodology                 | -94.790            | Refinement of repair, software maintenance and sustainment training models resulting in a net decrease.                                       |
| Cost Data Update                            | 0.000              |   |
| Labor Rate                                  | +15.048            | Increase in labor rates for software maintenance and sustainment training instructors.  |
| Energy Rate                                 | 0.000              |   |
| Technical Input                             | 0.000              |   |
| Programmatic/Planning<br>Factors            | +49.742            | Increase in program office staff, sustainment training, and civilian field support due to reduction in sharing across AMF JTRS product lines. |
| Other                                       | 0.000              |   |
| Total Changes                               | -30.000            |   |
| Current Estimate                            | 3,316.8            |   |

The significant O&S cost decrease compared to the objective and threshold values is due to the large decrease in quantities as a result of the elimination of the Air Force and Navy radios. Additionally, the Non-Developmental Item approach decreases the annual unit support cost.

**Disposal Costs:**

Disposal costs are not included in the O&S costs. Disposal costs are estimated at \$2.0M (BY\$ 2008).